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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,714	01/18/2001	Sidney M. Baker	2761.100	1589

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EXAMINER	
FRENEL, VANEL	

ART UNIT	PAPER NUMBER
3626	

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/765,714	BAKER ET AL.	
	Examiner	Art Unit	
	Vanel Frenel	3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 9-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 9-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/5/06 has been entered.

Notice to Applicant

2. This communication is in response to the RCE filed on 7/5/06. Claims 1-7 and 9-18 have been amended. Claim 8 has been canceled. Claims 1-7 and 9-18 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-7 and 9-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pattichis (Neural Network Models in EMG Diagnosis; May 5, 1995), Gulati (6,780,589) in view of GOLDENBERG (2002/0065682).

(A) As per claim 1, Pattichis discloses a system comprising: an interactive medico-health data acquisition interface (See Pattichis, Page 487, Paragraphs 1-4); a memory (See Pattichis, Page 486, Pargraphs 1-2).

Pattichis and Gulati do not explicitly disclose that the system having a data processing module; and a reporting module to report conclusions of the data processing module to a user, wherein in operation a user is prompted to and enters data via the interactive medico-health data acquisition interface that collectively comprise a substantially complete medico-health description of said user, wherein the data is expressed using the terminology of a defined substantially comprehensible medico-health taxonomy, and wherein the user entered data is stored in a defined data structure related to the taxonomy.

However, these features are known in the art, as evidenced by GOLDENBERG. In particular, GOLDENBERG suggests that the system having a data processing module (See GOLDENBERG, Page 3, Paragraph 0040); and a reporting module to report conclusions of the data processing module to a user (See GOLDENBERG, Page 3, Paragraphs 0040-0041), wherein in operation a user is prompted to and enters data via the interactive medico-health data acquisition interface that collectively comprise a substantially complete medico-health description of said user (See GOLDENBERG, Page 5, Paragraphs 0051-0053), wherein the data is expressed using the terminology of a defined substantially comprehensible medico-health taxonomy (See GOLDENBERG, Page 7, Paragraph 0065), and wherein the user entered data is stored

in a defined data structure related to the taxonomy (See GOLDENBERG, Page 4, Paragraphs 0046-0047).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of GOLDENBERG within the collective teachings of Pattichis and Gulati with the motivation of providing a networked system liking individuals with a server that provides practical medical, veterinary, or health care information on disease or health subjects of interest to an inquirer. The server also allows the inquirer to interact with health care professionals at several levels, from pure information gathering to medical diagnostic and therapeutic interventions by telemedicine methods (See GOLDENBERG, Page 2, Paragraph 0013).

(B) As per claim 2, GOLDENBERG discloses the system wherein the interactive medico-health data acquisition interface obtains the data by dynamically posing a plurality of questions to a user (See GOLDENBERG, Page 4, Paragraph 0044).

(C) As per claim 3, Pattichis discloses the system wherein the data processing module implements a clustering generation algorithm (See Pattichis, Page 490, Paragraphs 2-3).

(D) As per claim 4, GOLDENBERG discloses the system wherein the cluster generation algorithm finds a cluster of other human beings medically similar to the human being and does at least one of storing the cluster for further processing,

reporting the members of the cluster to the user, further processing the data associated with the individuals in the cluster and facilitating on-line communications between the various members of the cluster (See GOLDENBERG, Page 3, Paragraphs 0029-0031).

(E) As per claim 5, GOLDENBERG discloses the system wherein the data processing module further processes the generated cluster to generate useful information for the user (See GOLDENBERG, Page 4, Paragraphs 0043-0044).

(F) As per claim 6, GOLDENBERG discloses the system wherein the data processing module implements an algorithm that measures medical similarity according to a defined distance metric (See GOLDENBERG, Page 5, Paragraphs 0051-0052).

(G) As per claim 7, Pattichis discloses a method comprising: describing a substantially complete medico-health description of a human using the terminology of a defined substantially comprehensive medico-health taxonomy (See Pattichis, Page 486, Paragraphs 1-2).

Pattichis and Gulati do not explicitly disclose that the method having storing a mathematical representation of said description in a database; measuring the distance between the representation and all other representation in the database; identifying the cluster of closest other representations within the database; and analyzing the cluster of closest other representations for useful information medico-health, wherein at least one

of the describing, storing, measuring, identifying or analyzing is performed by, or with the assistance of, a computer or data processor.

However, these features are known in the art, as evidenced by GOLDENBERG. In particular, GOLDENBERG suggests that the method having storing a mathematical representation of said description in a database (See GOLDENBERG, Page 1, Paragraph 0010); measuring the distance between the representation and all other representation in the database (See GOLDENBERG, Page 1, Paragraph 0009); identifying the cluster of closest other representations within the database (See GOLDENBERG, Page 1, Paragraphs 0011-0013); and analyzing the cluster of closest other representations for useful information medico-health, wherein at least one of the describing, storing, measuring, identifying or analyzing is performed by, or with the assistance of, a computer or data processor (See GOLDENBERG, Page 1, Paragraphs 0011-0013).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of GOLDENBERG within the collective teachings of Pattichis and Gulati with the motivation of providing a networked system liking individuals with a server that provides practical medical, veterinary, or health care information on disease or health subjects of interest to an inquirer. The server also allows the inquirer to interact with health care professionals at several levels, from pure information gathering to medical diagnostic and therapeutic interventions by telemedicine methods (See GOLDENBERG, Page 2, Paragraph 0013).

(H) As per claim 9, Gulati discloses the method where the number of other representations in the cluster is set dynamically (See Gulati, Col.4, lines 51-59)).

(I) As per claim 10, Gulati discloses the method where the number of other representations in the cluster is determined by means of comparing the moving average of the incremental increases in the distance associated with each added representation to a defined threshold (See Gulati, Col.5, lines 18-30).

(J) As per claim 11, Pattichis discloses the method wherein the analysis of the cluster generates useful medical information for the human being (See Pattichis, Page 494, Paragraph 6).

(K) As per claim 12, Pattichis discloses the method wherein the distance between the representations in the database is a measure of medico-health similarity (See Pattichis, Page 494, Paragraph 5).

(L) As per claim 13, Pattichis discloses a method of expressing a human's substantially comprehensive medico-health state as a multidimensional vector in a hyperspace (See Pattichis, Page 487, Paragraphs 5-6) comprising: articulating a substantially comprehensive description of the human's medico-health state using a specialized taxonomy via an interactive medico-health data acquisition interface (See Pattichis, Page 487, Paragraphs 1-4); and mapping the articulation to a vector in

hyperspace whose components are numbers indicating a measure of the presence or the absence of each of a set of medico-health attributes (See Gulati, Col.5, lines 18-47).

Pattichis and Gulati do not explicitly disclose that the method having wherein at least one of said articulating and mapping is performed by, or with the assistance of, a computer system, and wherein the components of said vector constitute a substantially orthogonal basis set for specifying a point in the hyperspace.

However, this feature is known in the art, as evidenced by GOLDENBERG. In particular, GOLDENBERG suggests that the method having wherein at least one of said articulating and mapping is performed by, or with the assistance of, a computer system, and wherein the components of said vector constitute a substantially orthogonal basis set for specifying a point in the hyperspace (See GOLDENBERG, Page 1, Paragraphs 0011-0013; Page 8, Pargraph 0067).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of GOLDENBERG within the collective teachings of Pattichis and Gulati with the motivation of providing a networked system liking individuals with a server that provides practical medical, veterinary, or health care information on disease or health subjects of interest to an inquirer. The server also allows the inquirer to interact with health care professionals at several levels, from pure information gathering to medical diagnostic and therapeutic interventions by telemedicine methods (See GOLDENBERG, Page 2, Paragraph 0013).

(M) As per claim 14, Gulati discloses the method wherein the numbers vary between zero and an integer upper bound (Col.12, lines 40-59; Col.17, lines 35-67).

(O) As per claim 15, Pattichis discloses a method comprising: encoding a substantially comprehensive description of a human's medico-health state to a set of numerical values (See Pattichis, Page 487, Paragraphs 1-4).

Pattichis and Gulati do not explicitly disclose that the method having wherein said encoding is implemented by, or with the assistance of, a computer program in response to data supplied by a user interacting with an automated interactive prompter interface that queries the user and elicits user responses in terms of a defined substantially comprehensive medico-health taxonomy, and wherein the set of numerical values comprise the values of elements that collectively form a substantially orthogonal basis set in a hyperspace.

However, these features are known in the art, as evidenced by GOLDENBERG. In particular, GOLDENBERG suggests that the method having wherein said encoding is implemented by, or with the assistance of, a computer program in response to data supplied by a user interacting with an automated interactive prompter interface that queries the user and elicits user responses in terms of a defined substantially comprehensive medico-health taxonomy, and wherein the set of numerical values comprise the values of elements that collectively form a substantially orthogonal basis set in a hyperspace (See GOLDENBERG, Page 1, Paragraphs 0011-0013).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of GOLDENBERG within the collective teachings of Pattichis and Gulati with the motivation of providing a networked system liking individuals with a server that provides practical medical, veterinary, or health care information on disease or health subjects of interest to an inquirer. The server also allows the inquirer to interact with health care professionals at several levels, from pure information gathering to medical diagnostic and therapeutic interventions by telemedicine methods (See GOLDENBERG, Page 2, Paragraph 0013).

(N) As per claim 16, Gulati discloses the method wherein each of the values of elements itself has M fields or dimensions (Col.11, lines 54-67).

(Q) As per claim 17, Gulati discloses the method wherein M equals three (The Examiner interprets row and column to be a form of three-dimensional See Col.11, lines 54-67).

(R) As per claim 18, Pattichis discloses the method wherein each three-dimensional value is a unique coincidence of: a bodily system identifier (Page 489, Paragraphs 2-4); an identifier of a medical condition or pertinent fact (See Page 489, Paragraphs 2-4); and an identifier of anatomical location (See Page 489, Paragraphs 2-4).

Response to Arguments

5. Applicant's arguments filed on 7/5/06 with respect to claims 1-7 and 9-17 have been fully considered but they are not persuasive. Applicant's arguments will be addressed hereinbelow in the order in which they appear in the response filed 5/25/06.

(A) At pages 8-13 of the 7/5//06 response, Applicant argues that the newly added features in the 7/5/06 amendment are not taught or suggested by the applied references.

In response, all of the limitations which Applicant disputes as missing in the applied references, including the features newly added in the 7/5/06 amendment, have been fully addressed by the Examiner as either being fully disclosed or obvious in view of the collective teachings of Pattichis, Gulati and/or GOLDENBERG, based on the logic and sound scientific reasoning of one ordinarily skilled in the art at the time of the invention, as detailed in the remarks and explanations given in the preceding sections of the present Office Action and in the prior Office Action, and incorporated herein. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would

have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not the applied art teaches computerized medical diagnostic and treatment device system including network access (2005/0165285), taxonomy generation for document collections (6,446,061) and ELSEVIER Computer Methods and Programs in Biomedicine 54 (1997) 115-122; Automatic SNOMED classification-a corpus-based method by (.M. de Bruijn [a]*, A. Hasman [a], J.W. Arends [b]; 1997).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 571-272-6769. The examiner can normally be reached on 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

V.F

V.F

August 5, 2006

C. LUKE GILLIGAN
PATENT EXAMINER